



<b>Licence Number</b>	L9037/2017/1
<b>Licence Holder</b>	Process Minerals International Pty Ltd
<b>ACN</b>	063 988 894
<b>File Number:</b>	DER2017/000308-1
<b>Premises</b>	Mount Marion Lithium Project Shire of Coolgardie Mining Tenements M15/1000 and M15/717
<b>Date of Amendment</b>	31/05/2019

## Amendment

The Chief Executive Officer (CEO) of the Department of Water and Environmental Regulation (DWER) has amended the above Licence in accordance with section 59 of the *Environmental Protection Act 1986* (EP Act) as set out in this Amendment Notice. This Amendment Notice constitutes written notice of the amendment in accordance with section 59B(9) of the EP Act.

**Tim Gentle**

**Manager Resource Industries**

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

## Definitions and interpretation

### Definitions

In this Amendment Notice, the terms in Table 1 have the meanings defined.

**Table 1: Definitions**

Term	Definition
AACR	Annual Audit Compliance Report
ACN	Australian Company Number
AER	Annual Environment Report
Amendment Notice	refers to this document
Category/ Categories/ Cat.	categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
CEO	means Chief Executive Officer. CEO for the purposes of notification means:  Director General Department Administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 JOONDALUP DC WA 6919 <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a>
CS Act	<i>Contaminated Sites Act 2003 (WA)</i>
Delegated Officer	an officer under section 20 of the EP Act
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act.
DWER	Department of Water and Environmental Regulation
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
Existing Licence	The Licence issued under Part V, Division 3 of the EP Act and in force
Licence Holder	Process Minerals International Pty Ltd
LNG	Liquefied natural gas
m <sup>3</sup>	cubic metres

Minister	the Minister responsible for the EP Act and associated regulations
MS	Ministerial Statement
mtpa	million tonnes per annum
NEPM	National Environmental Protection Measure
Noise Regulations	<i>Environmental Protection (Noise) Regulations 1997 (WA)</i>
Occupier	has the same meaning given to that term under the EP Act.
Prescribed Premises	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Amendment Notice applies, as specified at the front of this Amendment Notice.
Risk Event	as described in <i>Guidance Statement: Risk Assessment</i>
UDR	<i>Environmental Protection (Unauthorised Discharges) Regulations 2004 (WA)</i>
WWTP	Wastewater treatment plant

## Amendment Notice

This amendment is made pursuant to section 59 of the *Environmental Protection Act 1986* (EP Act) to amend the Licence issued under the EP Act for a prescribed premises as set out below. This notice of amendment is given under section 59B(9) of the EP Act.

This notice is limited only to an amendment for Categories 5, 64 and 85.

The following guidance statements have informed the decision made on this amendment:

- *Guidance Statement: Regulatory Principles (July 2015)*
- *Guidance Statement: Decision Making (February 2017)*
- *Guidance Statement: Risk Assessment (February 2017)*

## Amendment description

On 6 October 2017 Process Minerals International (PMI) applied to amend their Licence to increase the throughputs for categories 5, 64 and 85 and install a new wastewater treatment plant (a similar submerged aerated filter plant to that already installed), increase the size of the wastewater sprayfield (category 85) and operate a second putrescible landfill (category 64). The amendment also sought approval to dispose of the coarse fraction of their tailings to either the northern ramp of the Ghost Crab Pit, a standalone landform or comingled with waste rock at the waste rock dumps instead of being deposited to the Ghost Crab In-pit TSF with the fine fraction of tailings.

The location of the second landfill is in a waste rock dump 2 on mining tenement M15/717 and M15/1000. A second landfill site was previously approved for construction via Works Approval W5734/2014/1 (since expired).

Due to the urgency of the requested application for coarse tailings in 2017, DWER assessed the part of the application related to the coarse (tailings) rejects and delayed the remaining assessment. This amendment notice completes the outstanding assessment.

Two other changes not included in the original application have been added due to changes since the original application. Category 73 is being formally amended to increase the authorised storage amount for liquefied natural gas (LNG) on the Licence. This increase has previously been notified to DWER (PMI 2018a, DWER 2018).

Due to a collapse of monitoring bore MTMPZ3 at Ghost Crab Pit, an amendment to the required monitoring bores for measuring the standing water level of groundwater in the vicinity of Ghost Crab Pit is also requested.

Table 2 below outlines the proposed changes to the Licence.

**Table 2: Proposed throughput capacity changes**

Category	Current throughput capacity	Proposed throughput capacity	Description of proposed amendment
5	2.4 Mtpa	3.0 Mtpa	Increase in processing capacity utilising the previously upgraded spodumene processing plant
64	750 tpa	1250 tpa	Additional landfill located in another waste rock dump. To account for an increase in staff. Second putrescible landfill previously approved via Works approval W5374/2014/1.

73	240kL LNG 554 kL Diesel	480 kL LNG 554 kL Diesel	Doubling of storage capacity for LNG. Previously notified by PMI (PMI 2018)
85	35 m <sup>3</sup> /day	70 m <sup>3</sup> /day	Installation of an additional wastewater treatment plant and doubling of the sprayfield to account for an increase in staff.

## Amendment history

Table 3 provides the amendment history for L9037/2017/1.

**Table 3: Licence amendments**

Instrument	Issued	Amendment
L9037/2017/1	16/12/2017	Amendment Notice 1 – authorise disposal of coarse rejects to either: <ul style="list-style-type: none"> <li>the western verge of the Ghost Crab Pit in an encapsulated landform; or</li> <li>comingled with waste rock and disposed of to waste rock landforms; or</li> <li>discharged onto the northern ramp of the existing Ghost Crab Pit.</li> </ul>
L9037/2017/1	31/05/2019	Amendment Notice 2 – authorise an increase in category 5 throughput and increases in categories 64 (operating an additional landfill) and 85 (second wastewater treatment plant and doubling of sprayfield area). Amendment of category 73 storage capacity and monitoring bores for groundwater monitoring.

## Location and receptors

Table 4 below lists the relevant sensitive land uses in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

**Table 4: Receptors and distance from activity boundary**

Residential and sensitive premises	Distance from Prescribed Premises
Residential Premises: Woolibar station homestead	15km east of the Premises
Town of Kambalda	23km south east of Premises

Table 5 below lists the relevant environmental receptors in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

**Table 5: Environmental receptors and distance from activity boundary**

Environmental receptors	Distance from Prescribed Premises
Department of Biodiversity, Conservation and Attractions managed lands and waters	<ul style="list-style-type: none"> <li>• “Class C” Yallari Timber Reserve, 2.3km southwest of the Premises (Native Vegetation Solutions 2016).</li> <li>• Karamindie State Forest, 6km northwest of Premises</li> <li>• Kambalda Nature Reserve, 5km southeast of Premises</li> </ul>
Threatened/Priority Flora	<p>The 2016 survey recorded a listed Priority 3 flora species under the <i>Wildlife Conservation Act 1950</i>, <i>Diocirea acutifolia</i>. It was recorded at 28 locations in the survey area. This species is widespread and in large numbers in the local and regional area (Native Vegetation Solutions 2016).</p> <p>A 2009 survey recorded 3 x Priority 3 flora species (<i>Diocirea acutifolia</i>, <i>Austrostipa blackii</i> and <i>Allocasuarina eriochlamys subsp grossa</i>) within the Premises (Recon Environment 2009 in DER 2010).</p>
Threatened/Priority Fauna	<p>Malleefowl (<i>Leipoa ocellata</i>) habitat is present within the boundaries of the Prescribed Premises. A survey in 2010 identified two extinct malleefowl mounds within the Premises boundary (DER 2016). Malleefowl is listed as vulnerable under the EPBC Act and is on schedule 1 of the <i>Wildlife Conservation Act 1950</i>, that is, fauna that is rare or is likely to become extinct.</p> <p>A condition has been added to the Clearing Permit CPS#6770/2 to require a fauna survey for Malleefowl and additional approval prior to clearing of its habitat.</p>

The distances to groundwater and water sources are as described in Table 6 below.

**Table 6: Groundwater and water sources**

Groundwater and water sources	Distance from Premises	Environmental value
Public drinking water source areas	No public drinking water source areas are located with a 100km radius of the Premises	N/A
Major watercourses/waterbodies	No major surface watercourses are located on or adjacent to the Premises. The nearest surface water receptor is Lake Lefroy, a saline lake located 24 km to the south east of the Premises. Lake Lefroy is also the groundwater receptor, from where the Wollubar/Lefroy palaeochannel discharges.	Lake Lefroy is a regionally significant salt lake, with peak biological productivity during large rainfall events, wherein invertebrate species coming out of dormancy are able to reproduce.
Groundwater	<p>Three groundwater systems are present on the Premises:</p> <ul style="list-style-type: none"> <li>• Surficial alluvium, silts and sandy material located less than 5m below ground level with an average thickness of between 5 – 15m.</li> <li>• Palaeochannel sediments: channel of fine to coarse quartz sand. A tributary of the Wollubar</li> </ul>	The palaeochannel tributary passing through the pit is hypersaline with a TDS of between 32 000 and 40 000 mg/L and pH of 6.4 (PSM 2016) and therefore not considered of environmental value. Groundwater samples taken from pegmatite intrusive stratigraphy at the Project (2km east of Ghost Crab Pit) recorded low salinity water (TDS 4 500 – 5 200 mg/L

	<p>Palaeochannel intersects the Ghost Crab Pit, at approximately 345m RL to 333m RL (between approximately 35 m and 47m below ground level), travelling from the south west to the south east through the pit. Inflow to the pit estimated at 190L/s during previous mining of gold at Ghost Crab Pit in 1998 (PSM 2016).</p> <ul style="list-style-type: none"> <li>Weathered/fractured bedrock, groundwater located in sheared and fractured rock zones (PSM 2016).</li> </ul>	<p>and alkaline pH (7.9 – 8.3) (PSM 2016). Previous gold mining operations have dewatered around the pit. The dewatering program consisted of six bores installed in the 1990s which attempted to access the palaeochannel aquifer but only recorded very low groundwater yields of less than 1 L/s (compared to recorded inflows of up to 190 L/s into the pit ) (PSM 2016). Both groundwater sources are used for the purposes of mining or industrial applications. Adjacent towns are serviced by scheme water (PSM 2016).</p>
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## Performance of existing installed Wastewater Treatment Plant

Licence L9037 currently prescribes that wastewater discharged from the wastewater treatment plant to the sprayfield must meet a standard equivalent to or better than that of 'class C' according to the *Australian Guidelines for Sewerage Systems – Effluent Management* (ANZECC 1997; refer to Condition 7 and Table 6 (previously Condition 5 and Table 5) of the Licence).

According to the Licence Holder's 2018 Annual Audit Compliance Report, monitoring results for wastewater effluent did not meet the limit for total suspended solids in June 2018 (PMI 2019a). Further results submitted for the Annual Licence Fee submission indicate that the total suspended solids limit was not met in April, March, June, August, November, December in 2018, February and March 2019; noting that the Licence only requires quarterly monitoring (PMI 2019b). The nitrogen limit was exceeded in May, June, July, and August 2018. This may be due in part from the load on the current wastewater treatment plant which will be alleviated by an additional wastewater treatment plant. In response to the exceedances, additional maintenance works were completed on the Wastewater Treatment Plant and sprayfield, a screen was installed to capture and remove larger solids prior to the treatment plant and additional training for operators completed (PMI 2019a).

## Risk assessment

Tables 9 and 10 below describe the Risk Events associated with the amendment consistent with the *Guidance Statement: Risk Assessments*. Both tables identify whether the emissions present a material risk to public health or the environment, requiring regulatory controls.

The risk rating for these risk events has been determined in accordance with the risk rating matrix set out in Table 7 below.

**Table 7: Risk rating matrix**

Likelihood	Consequence				
	Slight	Minor	Moderate	Major	Severe
Almost certain	Medium	High	High	Extreme	Extreme
Likely	Medium	Medium	High	High	Extreme
Possible	Low	Medium	Medium	High	Extreme
Unlikely	Low	Medium	Medium	Medium	High
Rare	Low	Low	Medium	Medium	High

The assessment of the consequence and likelihood of the Risk Event was made in

accordance with the criteria in Table 8 below.

**Table 8: Risk criteria table**

Likelihood		Consequence		
The following criteria has been used to determine the likelihood of the Risk Event occurring.		The following criteria has been used to determine the consequences of a Risk Event occurring:		
		Environment	Public health* and amenity (such as air and water quality, noise, and odour)	
Almost Certain	The risk event is expected to occur in most circumstances	Severe	<ul style="list-style-type: none"> <li>onsite impacts: catastrophic</li> <li>offsite impacts local scale: high level or above</li> <li>offsite impacts wider scale: mid-level or above</li> <li>Mid to long-term or permanent impact to an area of high conservation value or special significance<sup>^</sup></li> <li>Specific Consequence Criteria (for environment) are significantly exceeded</li> </ul>	<ul style="list-style-type: none"> <li>Loss of life</li> <li>Adverse health effects: high level or ongoing medical treatment</li> <li>Specific Consequence Criteria (for public health) are significantly exceeded</li> <li>Local scale impacts: permanent loss of amenity</li> </ul>
Likely	The risk event will probably occur in most circumstances	Major	<ul style="list-style-type: none"> <li>onsite impacts: high level</li> <li>offsite impacts local scale: mid-level</li> <li>offsite impacts wider scale: low level</li> <li>Short-term impact to an area of high conservation value or special significance<sup>^</sup></li> <li>Specific Consequence Criteria (for environment) are exceeded</li> </ul>	<ul style="list-style-type: none"> <li>Adverse health effects: mid-level or frequent medical treatment</li> <li>Specific Consequence Criteria (for public health) are exceeded</li> <li>Local scale impacts: high level impact to amenity</li> </ul>
Possible	The risk event could occur at some time	Moderate	<ul style="list-style-type: none"> <li>(i) onsite impacts: mid-level</li> <li>(ii) offsite impacts local scale: low level</li> <li>(iii) offsite impacts wider scale: minimal</li> <li>(iv) Specific Consequence Criteria (for environment) are at risk of not being met</li> </ul>	<ul style="list-style-type: none"> <li>(v) Adverse health effects: low level or occasional medical treatment</li> <li>(vi) Specific Consequence Criteria (for public health) are at risk of not being met</li> <li>(vii) Local scale impacts: mid-level impact to amenity</li> </ul>
Unlikely	The risk event will probably not occur in most circumstances	Minor	<ul style="list-style-type: none"> <li>(viii) onsite impacts: low level</li> <li>(ix) offsite impacts local scale: minimal</li> <li>(x) offsite impacts wider scale: not detectable</li> <li>(xi) Specific Consequence Criteria (for environment) likely to be met</li> </ul>	<ul style="list-style-type: none"> <li>(xii) Specific Consequence Criteria (for public health) are likely to be met</li> <li>(xiii) Local scale impacts: low level impact to amenity</li> </ul>
Rare	The risk event may only occur in exceptional circumstances	Slight	<ul style="list-style-type: none"> <li>onsite impact: minimal</li> <li>Specific Consequence Criteria (for environment) met</li> </ul>	<ul style="list-style-type: none"> <li>Local scale: minimal to amenity</li> <li>(xiv) Specific Consequence Criteria (for public health) met</li> </ul>

<sup>^</sup> Determination of areas of high conservation value or special significance should be informed by the *Guidance Statement: Environmental Siting*.

\* In applying public health criteria, DWER may have regard to the Department of Health's *Health Risk Assessment (Scoping) Guidelines*



**Table 9: Risk assessment for proposed amendments during construction**

Risk Event					Consequence rating	Likelihood rating	Risk	Reasoning
Source/Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts				
<b>Category 85 Construction, mobilisation and positioning of infrastructure</b>	Construction of wastewater treatment plant infrastructure (pipelines, tanks) and additional sprayfield infrastructure	Noise	Air / wind dispersion	Noise may deter fauna from accessing their burrows/nests if these are located in the vicinity of the accommodation camp.	Minor	Possible	Medium	Noise from construction works may impact on fauna species in the vicinity of the WWTP (adjacent to the camp). Given the camp is located 2km from the processing facility, noise impacts from construction works may cause a short term impact.
		Dust		No residences or other human receptors in proximity. Adjacent vegetation/fauna may be impacted.	A short term dusting event associated with construction may deter fauna and potentially cause a short term impact to vegetation.	Slight	Unlikely	Low

**Table 10: Risk assessment for proposed amendments during operation**

Risk Event					Consequence rating	Likelihood rating	Risk	Reasoning	
Source/Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts					
<b>Cat 5</b> Processing or beneficiation of metallic or non-metallic ore	Increased rates of operation of crushing infrastructure and movement of concentrate/coarse rejects (from 2.4 Mtpa ore processed to 3.0 Mtpa ore processed)	Dust: associated with crushing and screening, truck movements, loading of concentrate and reject tailings	Adjacent vegetation	Air	Health and amenity impacts	Minor	Possible	Medium	Dust sources with the crushing plant have sprays on transfer points to reduce fugitive emissions. Stockpiles themselves are not a significant source given the moisture of the concentrate and reject tailings (5 – 8% moisture). Truck movements are a local source of dust emissions; however their movements are not adjacent to vegetated areas.
	Increased ore processing from 2.4 Mtpa to 3.0 Mtpa	Additional fine tailings deposition to Ghost Crab Pit	Adjacent native vegetation	Groundwater mounding from seepage	Inundation of vegetation rootzones within mounding zone	Slight	Possible	Low	With the tailings stream to Ghost Crab Pit accepting fines tailings alone, the capacity and life of the TSF is extended. The freeboard condition on the Licence, together with the requirements to monitor freeboard and standing water levels in the adjacent monitoring bores to ensure that the groundwater level remains below 6 mbgl ensures that the potential impact to vegetation is mitigated.

<b>Category 64 Operation of a Class II (putrescible) landfill</b>	Increase in disposal of waste from 750 tpa to 1250 tpa to two landfills - Poor management of landfill operations	Windblown rubbish	Soil and fauna. No native vegetation is adjacent to the landfill; landfill is within a waste rock landform and surrounded by cleared areas.	Direct discharge/ movement by surface water following rainfall	Soil contamination. May attract vermin/ feral animals which may predate on local fauna (e.g. Malleefowl)	Minor	Unlikely	Medium	Existing internal and licence controls for the current landfill will be enacted for the second landfill. The controls should ensure that the risk of windblown waste being created is low.
<b>Cat 85 Wastewater Treatment Plant Operation and Disposal of treated effluent via land irrigation</b>	Treatment of sewage	Odour	No residences or other sensitive receptors in proximity	Air / wind dispersion	None	N/A	N/A	N/A	No receptor present
	Rupture of pipes/ overtopping of holding tanks	Sewage	Soil and vegetation adjacent to discharge area	Direct discharge	Soil contamination causing poor native vegetation health or death; vigorous weed growth	Moderate	Unlikely	Medium	Most tanks in the process are enclosed within a sea container with the exception of the balance tank. The balance tank will be located within a bund. Process control of tank levels is interlocked to the feed pumps; that is, if flow is above a high level the feed is stopped and a high level alarm sounds.
	Irrigation of poorly treated effluent	Poorly treated effluent				Minor	Likely	Medium	Previous performance of the existing WWTP (PMI 2019a) indicates that additional controls are required in order to ensure the quality of the discharge meets licence limits.
	Irrigation of treated effluent	Leachate from Irrigated Effluent Discharge	Groundwater	Soil to groundwater	Groundwater contamination with nutrients	N/A	N/A	N/A	Groundwater not considered a receptor given its hypersalinity.

## Decision

The application to increase the thresholds for categories 5, 64 and 85 is approved, given the low to medium environmental risks associated with the construction (wastewater treatment plant) and expanded operation of current activities (ore processing, landfill and wastewater treatment plant).

Licence Holder controls for the construction of the new wastewater treatment plant are conditioned on the Licence to ensure that potential construction impacts are mitigated. The limits for wastewater effluent quality for discharge remain as per Condition 7 of the Licence. Overloading and poor operation of the current plant may be rectified by the installation of another plant and additional training and maintenance that has been employed recently in response to poor monitoring results. Pending further monitoring results from the new and existing wastewater treatment plants, further controls may be required to ensure the water quality limits for the discharge are met.

The new landfill must comply with the existing requirements as listed in Table 5 'Infrastructure and equipment controls table'. Monitoring and inspections of the landfill are as listed in Conditions 10 and 11 (previously Conditions 8 and 9).

No changes are required to the conditions for ore processing or tailings deposition for the incremental increase in ore processing throughput from 2.4 Mtpa to 3.0 Mtpa. Condition 15 (previously 13) will be amended to remove bore MTMPZ3 due to the bore having collapsed and being unable to be sampled. Given the presence of existing bores in the vicinity of MTMPZ3 this bore is not required to be replaced.

The Primary Activities Table (Table 7) of Schedule 2 of the Licence will be amended to update the total volume of LNG stored on site under category 73. The category thresholds for categories 6, 64 and 85 will also be updated in accord with the new authorised throughput amounts.

## Licence Holder's comments

The Licence Holder was provided with the draft Amendment Notice on 22 May 2019. Comments received from the Licence Holder have been considered by the Delegated Officer as shown in Appendix 2.

## Amendment

1. Table 2 of Condition 1 of the Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the red text shown in underline below:

### (part of) Table 211: Authorised Emissions table

Column 1	Column 2
Emission type	Exclusions/Limitations/Requirements
<b>Specified Emissions</b>	
Tailings (with the exception of coarse reject material)	Subject to compliance with Condition 6.
Treated effluent	To be discharged to the irrigation spray field located as per 'WWTP spray field' in Figure

Column 1	Column 2
Emission type	Exclusions/Limitations/Requirements
	1 of Schedule 1. Wastewater effluent that is discharged to the irrigation area to meet the limits as prescribed in Condition <del>5-7</del> .
Class II waste (putrescible and inert)	To be disposed to the fenced landfill <del>s</del> located within the <del>Ghost Crab Pit</del> waste rock landform <del>s</del> as shown in Figure 4 <u>2</u> in Schedule 1.
Used tyres and rubber	To be disposed of to the waste rock landform adjacent Pit <u>N1</u> as shown in Figure 1 in Schedule 1.
Coarse reject (tailings) materials	Subject to compliance with Conditions 4, 5 and 6.

2. Table 3 of Condition 2 of the Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the red text shown in underline below:

**Table 3: Wastewater Treatment Plant Infrastructure requirements table**

Column 1	Column 2	Column 3
Infrastructure/ Equipment	Requirements (design and construction)	Site plan reference
A <u>second</u> Submerged Aerated Filter Wastewater Treatment Plant, as detailed in Schedule 2; capacity of 35m <sup>3</sup> /day.	Tanks to be bunded so to contain volume of 110% of the largest tank. <u>Water cart to be used to manage dust emissions.</u>	Within the area denoted 'Camp Accommodation' as shown in Figure 1 in Schedule 1
Effluent discharge pipeline from WWTP to irrigation spray field	Sample point to be installed on the discharge pipeline.	
	A flow meter to be installed on pipeline to allow discharge volumes to be measured.	
WWTP Irrigation Spray Field	At least <del>0.9</del> <u>2.0</u> ha in area. To be located in the area denoted as 'WWTP spray field'.	As shown in Figure 1 in Schedule 1

3. Condition 15 of the Licence is amended by the deletion of the text shown in strikethrough below:

15. Each quarter the Licence Holder shall measure and record standing water levels in mbgl, at bores MTMPZ1, MTMPZ2, ~~MTMPZ3~~ and MTMPZ4, as shown in Figure 2 in Schedule 2.



4. Schedule 1 of the Licence is amended by the insertion of the Figure 2 showing the two locations for putrescible landfills. The landfill at site 2 includes disposal of tyres and rubber (in separate trenches).



Figure 2: Location of landfills within Prescribed Premises Boundary



5. The Monitoring Locations Map in Schedule 2 of the Licence (denoted as Figure 2) is replaced by Figure 3 below.

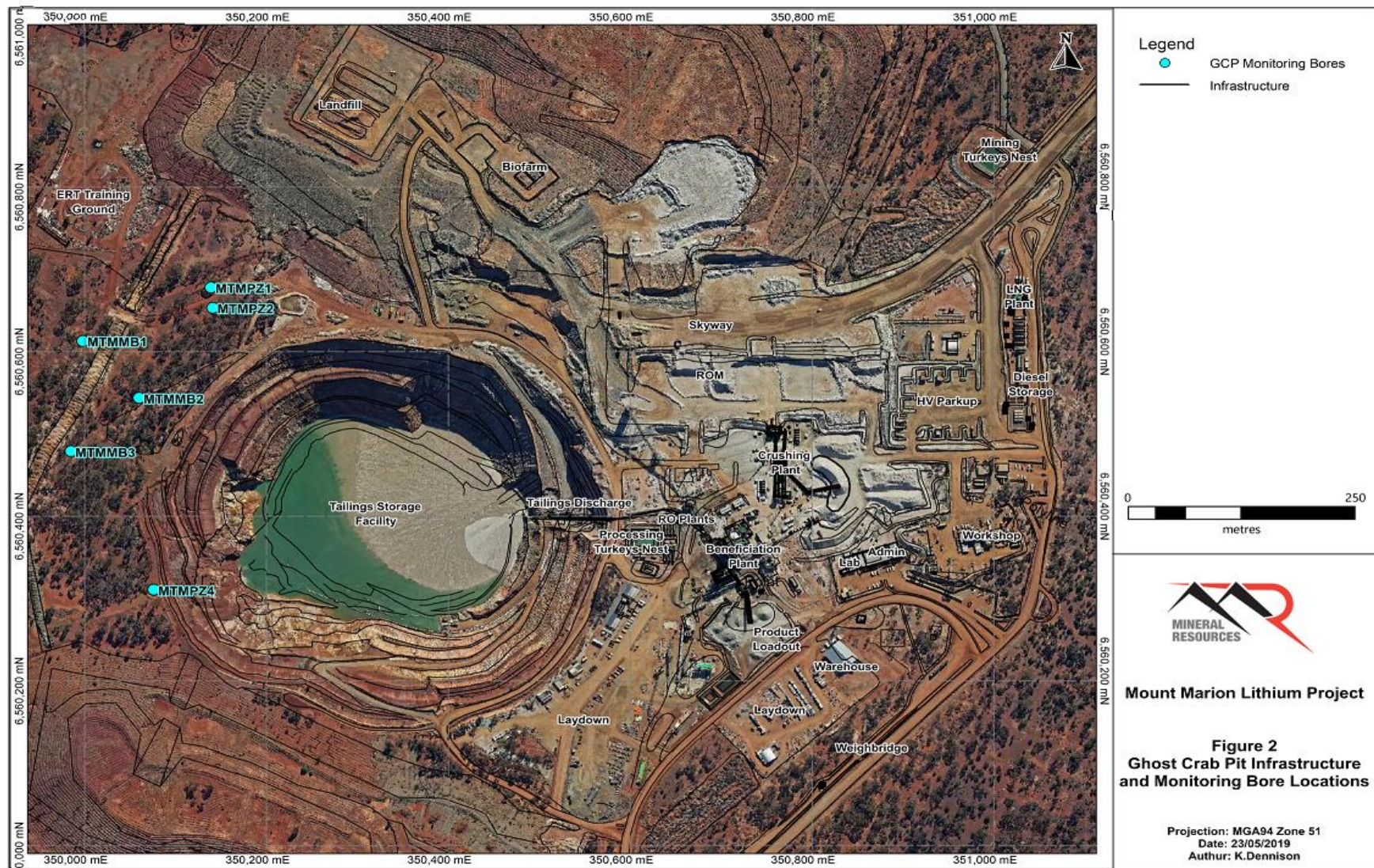


Figure 2 **3**: Groundwater monitoring bore locations



6. The Primary Activities as shown in Table 7 of Schedule 2 of the Licence is amended by the insertion of the red text in underline and deletion of text shown in strikethrough below:

**Table 7: Primary Activities**

Primary Activity	Premises production or design capacity
Category 5: Processing or beneficiation of metallic or non-metallic ores	2-4 <del>2.4</del> <u>3.0</u> million tonnes per annum
Category 57: Used tyre storage	1000 tyres
Category 64: Class II putrescible landfill	750 <del>1 250</del> tonnes per annum
Category 73: Bulk storage of chemicals	240 <del>224</del> <u>480</u> kL LNG 224 <del>554</del> kL Diesel
Category 85: Sewage facility	<del>35</del> <u>70</u> m <sup>3</sup> /day

## Appendix 1: Key documents

	Document title	In text ref	Availability
1	Australia and New Zealand Environment and Conservation Council (1997) <i>National Water Quality Management Strategy: Australian Guideline for Sewerage Systems – Effluent Management</i>	ANZECC 1997	<a href="http://www.environment.gov.au/system/files/resources/e52e452b-a821-4abe-9987-23988790e353/files/sewerage-systems-effluent-man-paper11.pdf">http://www.environment.gov.au/system/files/resources/e52e452b-a821-4abe-9987-23988790e353/files/sewerage-systems-effluent-man-paper11.pdf</a>
2	DER, July 2015. <i>Guidance Statement: Regulatory principles</i> . Department of Environment Regulation, Perth.	DER 2015a	accessed at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a>
3	DER, October 2015. <i>Guidance Statement: Setting conditions</i> . Department of Environment Regulation, Perth.	DER 2015b	
4	DER, November 2016. <i>Guidance Statement: Risk Assessments</i> . Department of Environment Regulation, Perth.	DER 2016b	
5	DER, November 2016. <i>Guidance Statement: Decision Making</i> . Department of Environment Regulation, Perth.	DER 2016c	
6	DWER (2018) Letter to PMI <u>Infrastructure Upgrades – Mt Marion – Licence L9037/2017/1</u> , dated 8 May 2018	DWER 2018	DWER records (A1669629)
7	Licence L9037/2017/1 – Mount Marion Lithium Project	L9037/2017/1	accessed at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a>
8	Process Minerals International (2017) Application to Amend Licence L9037/2017/1, dated 6 October 2017	PMI 2017	DWER records (A1536763)
9	Process Minerals International (2018a) Letter to DWER <u>Overview of Proposed Infrastructure Upgrades – Mt Marion</u> , dated 13 April 2018	PMI 2018a	DWER records (A1789200)
10	Process Minerals International (2019a) <i>Mount Marion Lithium Project Compliance Report 1 Jan 2018 – 31 December 2018</i>	PMI 2019a	DWER records (A1777226)
11	Process Minerals International (2019b) Email to DWER <u>L9037 2019-20 Licence fee application sent 14 May 2019, 06:19 AM</u> .	PMI 2019b	DWER records (A1789297)
12	Pells Sullivan Meynink (2016) <i>Mineral Resources Limited. Mt Marion Lithium Project. Strategy for Tailing into Ghost Crab Pit</i> , unpublished report for Miner	PSM 2016	DWER records (A1093383)
13	Works Approval W5734/2014/1– Mount Marion Lithium Project (as	W5734/2014/1	DWER records (A1100773)

	amended 19 May 2016; now expired)		
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## Appendix 2: Summary of Licence Holder comments

The Licence Holder was provided with the draft Amendment Notice on 22 May 2019 for review and comment. The Licence Holder responded on 30 May 2019 waiving the remaining comment period, following resolution of Licence Holder comments. The following comments were received on the draft Amendment Notice.

Condition	Summary of Licence Holder comment	DWER response
-	Second landfill location changed from original application	Accepted
7,6	Change from proposed Class A upgrade to remain at Class C for effluent	Accepted
10 (previously 8)	Request to change frequency of landfill inspections from weekly to fortnightly	DWER considers that weekly inspections are still required – noting the discussion on site that the enviro is only able to inspect fortnightly, DWER expects that an alternative should be able to do a quick inspection in the alternate weeks; just to ensure that the trenches are being covered and that windblown waste is not escaping.
Schedule 2	Increase to diesel storage as part of category 73	Accepted
7 (previously 5)	Request to clarify source of effluent limits	Effluent quality limits are the class C limits as per the 1997 Guidelines for Australian sewerage systems (reference given in the text and also in the original decision report)
4	Request to clarify need for fence for landfill within the waste dump; would large bunds and a fence at the entrance be acceptable.	Landfills within waste dumps can have a single fence and large bunds around the facility; the fencing requirement is about restricting members of the public from the landfill.